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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,387	03/05/2001	Jeffrey L. Krout	BASI.IP2020	3310

7590

05/13/2002

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 05/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/800,387

Applicant(s)

KROUT ET AL.

Examiner

Giovanna M. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period of Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

On page 4, line 24 --fastner-- should be changed to "fastener".

In claim 9, line 18 --form-- should be changed to "from".

In claim 26, line 22 --fastner-- should be changed to "fastener".

Appropriate correction is required.

### ***Drawings***

2. Figures 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by International Patent WO9919136 to Schafstein et al.

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Schafstein et al. disclose an apparatus (see Figs. 1 and 2) for use in repairing a leak in a plastic pipe, the apparatus comprising a body (10) constructed of a substantially rigid material and having an upper surface (13) and a lower surface (at 17), the lower surface adapted to be positionable about at least a leak portion of a plastic pipe; and an electrofusion element (17) disposed about the lower surface of the body operable to sealably couple with the plastic pipe to encapsulate the leak.

Referring to claim 2, Schafstein et al. disclose the apparatus of claim 1 wherein the electrofusion element (17) disposed about the lower surface of the body substantially is capable of defining a perimeter positionable adjacent the leak portion of the plastic pipe to sealably couple with the plastic pipe to encapsulate the leak

Referring to claim 3, Schafstein et al. disclose the apparatus of claim 2 wherein the apparatus further includes a terminal (18) electrically connected to the electrofusion element (17) operable to energize the electrofusion element.

Referring to claim 4, Schafstein et al. disclose the apparatus of claim 3 wherein the apparatus further includes a fastener (14) operable to secure the apparatus to the plastic pipe.

Referring to claim 5, Schafstein et al. disclose the apparatus of claim 4 wherein the body is a substantially cylindrical body provided with at least one sidewall extending from the body such that the lower surface is positioned on one end of the sidewall.

Referring to claim 6, Schafstein et al. disclose the apparatus of claim 5 wherein the sidewall defines a cavity (11) in the substantially cylindrical body, the cavity of the substantially cylindrical body in communication with the leak portion of the plastic pipe.

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4. Claims 13,16-18 and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by to German Patent 29722603 to Hintzen.

Hintzen discloses (see Fig. 1) an apparatus for use in repairing a leak in a plastic pipe, the apparatus comprising a first portion (10) having a first pipe engaging electrofusion surface (25), a second pipe engaging electrofusion surface (26), a first contact surface (32), and a second contact surface (33); and a second portion (see page 3, lines 6-10) having a first pipe engaging electrofusion surface (25), a second pipe engaging electrofusion surface (26), a first contact surface (32), and a second contact surface (33) wherein the first portion and the second portion are operable to encapsulate the leak, the first pipe engaging electrofusion surfaces of the first and second portions are operable to couple around the pipe to form a first seal, the second pipe engaging electrofusion surfaces of the first and second portions are operable to couple around the pipe to form a second seal, the first contact surfaces of the first and second portions are operable to sealably couple with one another, and the second contact surfaces of the first and second portions are operable to sealably couple with one another.

Referring to claim 16, Hintzen discloses the apparatus of claim 13 wherein the apparatus further includes a first (28) and a second terminal, the first terminal attached to the first portion and operable to energize the first and second pipe engaging electrofusion surfaces of the first portion, the second terminal (see page 3, line 6-10) attached to at least one of the first and second portions and operable to energize the first and second pipe engaging electrofusion surfaces of the second portion.

Referring to claim 17, Hintzen discloses the apparatus of claim 13 wherein the first (32) and second contact surfaces (33) of the first portion are further provided with electrofusion

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elements operable to sealably couple the first contact surfaces of the first and second portions to one another and operable to sealably couple the second contact surfaces of the first and second portions to one another.

Referring to claim 18, Hintzen discloses the apparatus of claim 13 wherein the first (32) and second contact surfaces (33) of the first and second portions (see page 3, lines 6-10) are further provided with electrofusion elements operable to sealably couple the first contact surfaces of the first and second portions to one another and operable to sealably couple the second contact surfaces of the first and second portions to one another.

Referring to claim 24, Hintzen discloses a method for sealing a leak in a plastic pipe comprising providing an apparatus comprising a first portion (10) having a first pipe engaging electrofusion surface (25), a second pipe engaging electrofusion surface (26), a first contact surface (32), and a second contact surface (33); and a second portion (see page 4, lines 6-10) having a first pipe engaging electrofusion surface (25), a second pipe engaging electrofusion surface (26), a first contact surface (32), and a second contact surface (33) wherein the first portion and the second portion are operable to encapsulate the leak, the first pipe engaging electrofusion surfaces of the first and second portions are operable to couple around the pipe to form a first seal, the second pipe engaging electrofusion surfaces of the first and second portions are operable to couple around the pipe to form a second seal, the first contact surfaces of the first and second portions are operable to sealably couple with one another, and the second contact surfaces of the first and second portions are operable to sealably couple with one another; encapsulating the leak in the plastic pipe with the a first portion and a second portion; electrofusing the first portion and the second portion together at the first contact surfaces;

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electrofusing the first portion and the second portion together at the second contact surfaces; electrofusing the first and second pipe engaging electrofusion surfaces of the first and second portions; and electrofusing the second pipe engaging electrofusion surfaces of the first and second portions.

Referring to claim 25, Hintzen discloses the method as defined by claim 24 wherein the apparatus provided further comprises at least one terminal (28) connected to the apparatus electrically operable to energize first and second pipe engaging electrofusion surfaces of the first and second portions, and wherein the method further includes energizing the terminal on the apparatus to electrofuse the first and second pipe engaging electrofusion surfaces of the first and second portions.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent WO9919136 to Schafstein et al. in view of Barrett et al. ('233).

Schafstein et al. disclose the apparatus of claim 6 but do not disclose the plastic pipe is polyethylene. Barrett et al. teaches that electrofusion is a common practice for sealed joining of polyethylene pipe (see col. 1, lines 16-18). Therefore it would be obvious to one skilled in the art to modify the apparatus disclosed by Schafstein et al. to be used on polyethylene pipes as

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taught by Barrett et al. because that electrofusion is a common practice for sealed joining of polyethylene pipe.

Referring to claim 8, Barrett et al. teach (see Fig. 10) wherein a substantially cylindrical body (18) is provided with a passageway (14) defining an opening extending through the substantially cylindrical body, the passageway in communication with the cavity of the substantially cylindrical body.

6. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent WO9919136 to Schafstein et al. in view of McAfee ('101).

Schafstein et al. disclose the apparatus of claim 4, that is provided with a plurality of sidewalls (15, 16) extending from the body such that the lower surface is positioned on one end of the sidewall but do not disclose the body is substantially rectangular. McAfee teaches (see Fig. 1) a rectangular box for repairing a leak in a box. McAfee further teaches the rectangular shape helps to support a pipe (see col. 1, line 11-14). Moreover, a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore it would be obvious to one skilled in the art at the time of the invention to modify the apparatus discloses by Schafstein et al. to include the rectangular shape taught by McAfee to support a pipe and because a change in the shape of a prior art device is a design consideration within the skill of the art.

Referring to claim 10, McAfee teaches a plurality of sidewalls (13, 14) defines a cavity (18) in the substantially rectangular body, the cavity of the substantially rectangular body in communication with the leak portion of a pipe.



7. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent WO9919136 to Schafstein et al. in view of McAfee ('101) as applied to claim 10 above, and further in view of Barrett et al. ('233).

Schafstein et al., as modified, discloses the apparatus of claim 10 but does not disclose the plastic pipe is polyethylene. Barrett et al. teaches that electrofusion is a common practice for sealed joining of polyethylene pipe (see col. 1, lines 16-18). Therefore it would be obvious to one skilled in the art to further modify the apparatus disclosed by Schafstein et al. to be used on polyethylene pipes as taught by Barrett et al. because that electrofusion is a common practice for sealed joining of polyethylene pipe.

Referring to claim 12, Barrett et al. teach (see Fig. 10) wherein a body (18) is provided with a passageway (14) defining an opening extending through the body, the passageway in communication with the cavity of the body. McAfee teaches a substantially rectangular body.

8. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent DE29722603 to Hintzen in view of International Patent WO9919136 to Schafstein et al.

Hintzen disclose a apparatus of claim 13 wherein the apparatus further includes a terminal (28) attached to the first portion, the terminal operable to energize the first and second engaging electrofusion surfaces of the first portion but does not disclose the terminal energizes first and second engaging electrofusion surfaces of the second portion. Schafstein teaches (see Fig. 2) an apparatus wherein the apparatus further includes a terminal (18) attached to the first portion, the terminal operable to energize the electrofusion surfaces of the first and second

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portions. Schafstein further teaches that the apparatus is designed to shorten the fusing time and decreases the amount of heating needed to join the members (see page 2, lines 21-26). Therefore it would be obvious to one skilled in the art at the time of the invention to modify the apparatus disclose by Hintzen to include a terminal that energizes the electrofusion surfaces of the first and second portions as taught by Schafstein to shorten the fusing time and decreases the amount of heating needed to join the members.

Referring to claim 15, Schafstein teaches (see Fig. 1) wherein a first portion (10) further includes a first electrical connector (28) attached thereto connectable to a second electrical connector (29) attached to the second portion (13) operable to communicate electricity from the terminal to the engaging electrofusion surfaces of the second portion.

9. Claims 19-23 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent 29722603 to Hintzen in view of Barrett et al. ('233).

Hintzen discloses an apparatus of claim 13 but does not disclose a fastener. Barrett teaches (see Fig. 1) an apparatus that further includes a fastener (28) operable to secure first (16) and second (20) portions together. Barrett et al. teach that the fasteners help the first and second portions of the apparatus to be securely coupled together in tight fitting engagement about the pipe (see col. 4, lines, 8-11). Therefore it would be obvious to one skilled in the art at the time of the invention to modify the apparatus disclosed by Hintzen to include fasteners as taught by Barrett et al. to securely couple the first and second portions together in tight fitting engagement about the pipe

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Referring to claim 20, Hintzen discloses wherein the first and second pipe engaging electrofusion surfaces (25,26) and the first and second contact surfaces (32) of the first portion define a sidewall providing a cavity (5) within the first portion such that the cavity communicates with a leak portion of the plastic pipe.

Referring to claim 21, Barrett et al. teach wherein a first portion (16) is provided with a passageway (14) defining an opening extending therethrough the first portion, the passageway in communication with the cavity (at 12) of the first portion.

Referring to claim 22, Hintzen discloses wherein the first and second pipe engaging electrofusion surfaces (25,26) and the first and second contact surfaces (32) of the second portion (see page 3, lines 6-10) define a sidewall providing a cavity (5) within the second portion such that the cavity communicates with a leak portion of the plastic pipe.

Referring to claim 23, Barrett et al. teach a plastic pipe is a polyethylene pipe (see col. 1, lines 16-18).

Referring to claim 26, Hintzen disclose a method as defined in claim 25. Hintzen does not disclose a fastener. Barrett et al. teach apparatus further includes a fastener (27) on at least one of a first (16) and second portions (26) operable to secure the first portion to the second portion, and wherein a method further includes fastening the fastener to secure the first portion to the second portion about a plastic pipe (12). Barrett et al. teach that the fasteners help the first and second portions of the apparatus to be securely coupled together in tight fitting engagement about the pipe (see col. 4, lines, 8-11). Therefore it would be obvious to one skilled in the art at the time of the invention to modify the method disclosed by Hintzen to include fasteners as

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taught by Barrett et al. to securely couple the first and second portions together in tight fitting engagement about the pipe

Referring to claim 27, Barrett et al. teach wherein the apparatus further includes an opening (14) in at least one of the first and second portions communicating with the leak in the plastic pipe, and wherein the method further comprises being able to test a leak in the plastic pipe via the opening in the apparatus; and sealably covering (at 14a) the opening in the apparatus.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,236,026 to Schafstein et al. discloses an apparatus with electrofusion surfaces.

U.S. Patent 6,331,698 to Hintzen discloses an apparatus with electrofusion surfaces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707. The examiner can normally be reached on 7:30-4 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

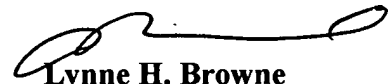
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gmc

May 6, 2002



**Lynne H. Browne**  
**Supervisory Patent Examiner**  
**Technology Center 3670**